

Application No. 10/607,914
Amendment "A" dated March 28, 2006
Reply to Office Action mailed December 28, 2005

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AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method for providing access to a data repository from an application, wherein the data repository includes any combination of relational databases and directory services, wherein data resident in the repository is organized via according to at least an implicit or explicit schema defining at least one schema class having therein at least one schema attribute and wherein the application utilizes object oriented programming that includes an object class and an object property that have a different format than the corresponding at least one schema class and attribute utilized by the repository, the method comprising:

receiving from the application, at an interface interposed between the application and the repository, an access command, wherein the access command identifies a particular an object class and a particular an object property of the object class in a format specific to the application and that is different than a format utilized by the repository to define a corresponding schema class and schema attribute, and where the access command further omits an identification of a particular schema class or a particular attribute of the schema;

translating, at the interface, the access command to a translated access command, wherein the translated access command identifies the a particular schema class and a particular the schema attribute corresponding to the object class and the object property of the schema, and wherein the translated access command further omits an identification of the particular class and the particular property of the class; and

transmitting the translated access command to the repository to obtain access to the repository.

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2. (Currently Amended) The method according to claim 1, wherein ~~the step of~~ translating the access command to a translated access command comprises:

reading a mapping that identifies the ~~particular-object~~ property of the object class and links the object ~~particular~~ property of the object class to ~~the particular~~ corresponding schema attribute of the schema; and

modifying the access command by removing a reference to the ~~particular-object~~ property of the object class and by adding to the access command a reference to the ~~particular-schema~~ attribute of the schema.

3. (Currently Amended) The method according to claim 2, wherein the step of translating the access command to a translated access command further comprises altering ~~the a~~ format of the command such that ~~the format of the translated access command is to a different~~ format that the repository is capable of processing to grant access to the repository.

4. (Original) The method according to claim 3, wherein the step of translating the access command to a translated access command further comprises employing an application programming interface to process an intermediate command derived from the access command.

5. (Currently Amended) The method according to claim 2, wherein the ~~particular~~ object class is defined by a class definition having therein a definition of the ~~particular-object~~ property, and at least one metadata tag associated with the definition of the ~~particular-object~~ property, and wherein reading the mapping that identifies the ~~particular-object~~ property of the object class ~~and links that particular-object property of the object class to the particular-schema attribute of the schema comprise reading the definition of the particular property and the associated metadata tag.~~

6. (Original) The method of claim 1, wherein the repository is an LDAP-compliant directory service, and wherein the schema is in accordance with the LDAP protocol.

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7. (Currently Amended) The method of claim 1, wherein the repository is an LDAP-non-compliant repository, and wherein the schema, including the schema is implicit class and the schema attribute are implicit within the non-compliant repository.

8. (Original) The method according to claim 7, further comprising extracting the implicit schema and recording it as an express schema.

9. (Currently Amended) The method according to claim 1 further comprising:
receiving a response from the repository pursuant to transmitting the translated access command to the repository, wherein the received response identifies the ~~particular~~ schema class and ~~particular schema attribute of the schema, and omits an identification of the particular class and the particular property of the class;~~

translating the received response to a translated response, wherein the translated response identifies the ~~particular object class and particular object property in a format specific to the application and that is different than a format utilized by the repository to define the corresponding schema class and schema attribute of the class, and omits an identification of the particular schema class and the particular attribute of the schema;~~ and

fulfilling the access command received from the application by transmitting the translated response to the application.

10. (Original) A computer-readable medium having stored thereon computer-executable instructions for performing the method according to claim 1.

11. (Original) A computer-readable medium having stored thereon computer-executable instructions for performing the method according to claim 2.

12. (Original) A computer-readable medium having stored thereon computer-executable instructions for performing the method according to claim 5.

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13. (Currently Amended) The method according to claim 1, wherein transmitting the translated access command to the repository to obtain access to the repository comprises transmitting the translated access command to an intermediary ~~filter component~~ API that transmits a corresponding ~~filtered~~ translated access command to the repository.

14. (Cancelled).

15. (Original) The method according to claim 1, wherein the access command is selected from the group consisting of a read command, a write command, and a search command.

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16. (Currently Amended) A directory interface for providing access to a data repository from an application, wherein the data repository includes any combination of relational databases and directory services, wherein data resident in the repository is organized according to at least an implicit or explicit schema defining at least one schema class having therein at least one schema attribute and wherein the application utilizes object oriented programming that includes an object class and an object property that have a different format than the corresponding at least one schema class and attribute attributes utilized by the repository, the directory interface comprising:

computer-executable instructions for implementing a method that includes:

receiving from the application, at an interface interposed between the application and the repository, an access command, wherein the access command identifies an object class and an object property of the object class in a format specific to the application and that is different than a format utilized by the repository to define a corresponding schema class and schema attribute;

translating, at the interface, the access command to a translated access command, wherein the translated access command identifies the schema class and the schema attribute corresponding to the object class and the object property; and

transmitting the translated access command to the repository to obtain access to the repository.

~~facilitating simplified access by an application to a repository wherein data is organized in accordance with a schema having at least one attribute, the directory interface comprising:~~

~~an application interface for receiving from the application an access command that omits an identification of the at least one attribute and for transmitting to the application a translated repository response that also omits an identification of the at least one attribute; and~~

~~a repository interface for transmitting a translated access command to the repository, wherein the translated access command is derived from the access command and includes an identification of the at least one attribute, and for receiving a repository response from which the translated repository response is derived, wherein the repository response also includes an identification of the at least one attribute.~~

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17. (Currently Amended) The directory interface according to claim 16, wherein translating the access command is performed by the repository interface comprises an application programming interface.

18. (Original) The directory interface according to claim 17, wherein the repository is LDAP-compliant and wherein the application programming interface of the repository interface comprises an LDAP API.

19-21. (Cancelled).

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22. (Currently Amended) A mapping tool embodied on a computer-readable medium for associating a property of a class with an attribute of a schema class of a repository schema, the mapping tool comprising:

computer-executable instructions for presenting a first graphical user interface for user-selection of ~~a selected class~~selectable object classes to be mapped to ~~a selected~~selectable schema ~~class-classes~~ and for receiving a user selection of ~~the selected~~at least one selectable object class and at least one the selected~~selectable~~ schema class from the graphical user interface;

computer-executable instructions for presenting a second graphical user interface for user-selection of ~~a selected~~at least one selectable property of ~~the~~a selected object class and at least one selectable~~a selected~~ attribute of ~~the~~a selected schema class and for receiving a user selection of ~~the~~a selected object property and ~~the~~a selected schema attribute; and

computer-executable instructions for annotating a definition of the selected object class with metadata associating the selected object property with the selected schema attribute in response to receiving a user selection of the selected object property and the selected schema attribute.

23. (New) A mapping tool as recited in claim 22, wherein the second graphical user interface is only presented after first receiving user input selecting said at least one selectable object class and said at least one selectable schema class from the graphical user interface.